FISHWAY STATUS REPORT

Date:	5/26/2018		
Inspection Period:	5/20/2018	thru	5/26/2018

JOHN DAY DAM

US Army Corps of Engineers Portland District JD/WC Project-Fisheries P.O. Box 823 Rufus, Oregon 97050 Phone: 541-506-7860

All JD Fishways are inspected twice per day during fish passage season, Mar. 1 - Nov. 30.

Frequent monitoring of the PLC displays in SMF Fisheries Office as necessary.

John Day Dam	Inspections	Criteria	Total Number of Inspections: 14 Temperature: 57 F
	Out of Criteria	Limit	Secchi: 3.2 Ft.
NORTH FISHWAY			In service with all 6 AWS pumps total available.
Exit differential	0	≤ 0.5'	
Exit Control weirs	0	High setting	High setting is normal for JDN
Count station differential	0	≤ 0.3'	
Weir crest depth (DS gauge)	0	1.0' ± 0.1'	
Entrance differential	0	1.0' - 2.0'	AVG 1.5
SOUTH FISHWAY	0		In service with two AWS turbines and two FOGs.
Exit differential	0	≤ 0.5'	
Exit Control weirs	0	Mid setting	Mid setting is normal for JDS
Count station differential	0	≤ 0.3'	
Weir crest depth (US gauge)	0	1.0' ± 0.1'	
South entrance differential	0	1.0' - 2.0'	AVG 1.3
Entrance weir SE1	0	depth (≥ 8')	AVG 8.3
Collection channel velocity	0	1.5 - 4 fps	AVG 2.54
N. Entrance PH(Bay 19)differential	0	1.0' - 2.0'	AVG 1.8
Entrance weir NE1	0	depth (≥ 8')	AVG 11.3
Entrance weir NE2	0	depth (≥ 8')	AVG 11.3
JUVENILE PASSAGE	0		In service since 2/28.
Forebay/bypass conduit differential	0	4.0' - 5.0'	AVG 4.5
Submersible traveling screens	0	visual inspect	Monthly STS camera inspection completed 5/14. All STS screens are in good working order.
Turbine trashrack drawdown	0	<1.5' <i>,</i> wkly	Trashrack raking crane failed on 5/22. Maintenance crew hoping to fix by 5/31.
Vert barrier screen drawdown	0	<1.5', wkly	
Spill volume	0	per FPP	Special operations to lower TDG/ spill started on 5/26 and will continue thru 6/1.
Spill pattern	0	per FPP	Two TSWs, bays 18 & 19 open since 4/10/18 AM.
Turbine Unit Priority	0	per FPP	
Turbine 1% Efficiency	0	per FPP	

SMOLT MONITORING FACILITY

Operation:

SMF in service with every other day sampling increased to every day on 5/26. It will continue thru 6/4 due to special JD operations to lower TDG.

Maintenance:

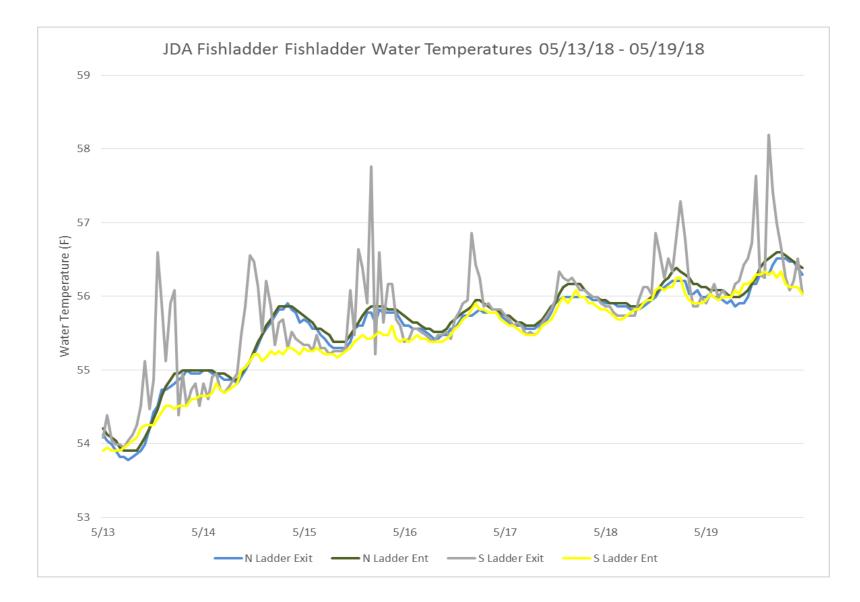
SMF SCADA update/mods' investigation by JD Electrical/ Portland District Engineers is underway. Awaiting for \$ 170 K UFR to complete in FY18. Research: None

Birds :

White pelicans continue increasing on the island downstream of BRZ but the BRZ gulls have declined over the past week. See Avian Numbers tab for details. All 125 avian lines in place without any deficiencies. USDA boat hazing commenced on 4/16 and will continue 7 days a week thru 7/31. JD BRZ avian/ gull presence has declined from minor to almost non-existent over the past week :) **Operations:** JD South Fishway in service, with two AWS turbines and two FOGs since 2/28/18. Awaiting special funding to overhaul turbines 1 & 2 (\$ 3 million each.) JD North Ladder in service since 12/21/17. 6 out of 6 AWS pumps available again since 4/18/18. MU Gatewell Drawdowns: All MUs trashrack differentials are 1.5' or below according to twice a week inspections. Maintenance: JD South AWS turbine 1 is OOS, in poor condition and urgently awaiting its overhaul as soon as \$ 3 million becomes available (hopefully in a year or two ?) JD Structural and Mechanical crew started working on the failed Trashrack crane on 5/22. Hoping to replace broken scoop's cable by 5/31. Calibration: All gauges/ sensors are within the criteria of 0.3'. Research: JDS and JDN Adult PIT systems are in service and detecting PIT tags since 3/1/18. Coordinating with CRITFC and Tribes for the upcoming adult lamprey collection season starting in late May. JD Mechanical continues planning for the JD North LPS water supply pumps installation. To be completed by 6/1. WDFW NPM angling from JD PH Tailrace deck started on 5/1. Catches started increasing the past week with 131 NPM caught thru 5/27.

Coordinating with Uof I crew for their JD Adult Lamprey RT installation/ monitoring at both adult fishways in 2018.





JDA Collection Channel Velocity

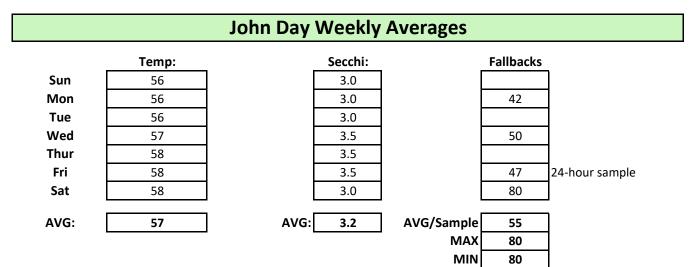
Date	19-May-18
By:	MDL

Bay(s)	Time	Sec.	Velocity (f/s)
0-2	1:08	68	2.65
2 - 4	2:07	127	3.05
4 - 6	3:17	197	2.57
6 - 8	4:28	268	2.54
8 - 10	5:31	331	2.86
10 - 12	6:37	397	2.73
12 - 14	7:47	467	2.57
14 - 16	8:55	535	2.65
16 - 18	10:00	600	2.77
			2.71

Bay 19 TW: 167.3 turbine 2-3=68rpm

FPP Criteria 1.5–4.0 feet per second (2 fps optimum)





	NE1	NE2	S.Ent	SE1	N.Ent	JBS Diff	Bay19
Sun	11.2	11.2	1.5	8.4	1.4	4.5	1.9
Sun	11.2	11.2	1.5	8.2	1.7	4.6	1.9
Mon	11.4	11.4	1.3	8.5	1.5	4.6	1.8
Mon	11.2	11.2	1.4	8.4	1.4	4.2	1.8
Tues	11.5	11.5	1.4	8.2	1.5	4.6	1.4
Tues	11.1	11.1	1.2	8.1	1.4	4.4	1.9
Wed	11.7	11.7	1.1	8.1	1.4	4.4	2.0
Wed	11.9	11.9	1.2	8.2	1.5	4.5	1.9
Thur	11.9	11.9	1.2	8.2	1.5	4.6	1.8
Thur	11.1	11.1	1.2	8.6	1.5	4.6	1.5
Fri	11.0	11.0	1.2	8.3	1.6	4.6	1.4
Fri	10.6	10.6	1.2	8.3	1.4	4.6	2.0
Sat	11.7	11.7	1.2	8.2	1.4	4.7	1.9
Sat	10.9	10.9	1.2	8.5	1.5	4.6	2.0
AVG:	11.3	11.3	1.3	8.3	1.5	4.5	1.8

JDA Bird Counts: <u>5/20/18</u> to <u>5/26/18</u>

NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone		Ģ	Gulls			Cori	morant	;		Caspia	an tern			White	e Pelica	an		G	rebe		Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
20-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	29	36	0	0	65
20-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	PH3	13	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
20-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20-May		50	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88
Avg/Su		6	0	(0	(0	()		0	(0	(0	(0	-	83	(0	185
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	36	0	0	55
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
21-May		19	19	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	40
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21-May		64	26	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	101
Avg/Su	-	7	-	(0		0	()		0		0		1		6	1	28	(0	208
22-May		0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	18	0	0	0	19
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May		14	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	20
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22-May		54	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	62
Avg/Su	-	3	4	(0		0	1	L		0	(0	1	3		4		9	(0	101
23-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	6	0	0	13
23-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May		7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8
23-May		12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	13
23-May		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23-May		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23-May		35	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77
Avg/Su	urvey	4	9	(D	(0	()		0	(0		1	:	1		7	(0	113

JDA Bird Counts: <u>5/20/18</u> <u>to</u> <u>5/26/18</u>

NF(1): Non-Forage AM Survey NF(2): Non-Forage PM Survey

Date	Zone		Ģ	iulls			Cormorant				Caspia	n tern			White	e Pelica	in	Grebe				Total
		F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	F(1)	F(2)	NF(1)	NF(2)	
24-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4
24-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	PH3	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
24-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24-May	SW3	0	42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
Avg/Su	urvey	2	25	(0	()	()		0	(0	(0	(0		2		0	54
25-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	16	22	49
25-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	PH1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	PH3	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
25-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25-May	SW3	0	30	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57
Avg/Su	urvey	1	.6	1	.4	()	()	_	0	(0		1	(0	(6	1	.9	109
26-May	PHFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	7	32	35	80
26-May	SWFB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	PH1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26-May	PH2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	PH3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
26-May	SW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	SW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26-May	SW3	20	20	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	42
Avg/Su	urvey	2	22	(0	(0	()		0	(D	:	1	(D		7	3	34	126

Totals	Ċ	Gulls	Cor	morant	Caspia	in tern	White	e Pelican	G	Total	
	F	NF	F	NF	F	NF	F NF		F NF		
Weekly Total	552	27	0	1	0	0	12	20	179	105	896
Avg/Survey	39	2	0	0	0	0	1	1	13	8	64